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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,746	07/31/2001	Clinton Gene Laschkewitsch	ROC920010041US1	2727

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EXAMINER

CHEA, PHILIP J

ART UNIT	PAPER NUMBER
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2153

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/918,746	<b>Applicant(s)</b> LASCHKEWITSCH ET AL.	
	<b>Examiner</b> Philip J. Chea	<b>Art Unit</b> 2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

This Office Action is in response to an Amendment filed April 28, 2006. Claims 8-23 are currently pending. Any rejection not set forth below has been overcome by the current Amendment.

#### ***Claim Rejections - 35 USC § 103***

1. Claims 8-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Badovintz et al. (US 6,026,426), and further in view of Elley et al. (US 6,883,100), herein referred to as Elley.

As per claim 8, Badovintz et al. disclose a system of managing membership of jobs in a cluster, as claimed, comprising:

- receiving a request to create a group comprising at least two jobs: creating, on a respective node on which each respective job is running, a list indicating each of the at least two jobs (see Fig. 4, where processing node 1 and processing node 2 each have respective lists indicating process x (job) running),
- receiving a request to join the group from a requesting member job (see column 5, lines 1-5, where a process (job) requests to join a process group).

Although the system disclosed by Badovintz et al. shows substantial features of the claimed invention (discussed above), it fails to disclose: that the requesting member job has membership to the group and accessing each list of each job of the group to determine whether the requesting member job is included in each list.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Badovintz et al., as evidenced by Elley.

In an analogous art, Elley discloses a system of managing group membership, wherein a server may look at a membership list to determine if a requesting member has membership (see Fig. 5, and column 5, lines 4-10).

Given the teaching of Elley, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Badovintz et al. by extending the system taught

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by Badovinatx of each member having a list, to look in their respective list to add a member, such as disclosed by Elley, in order to determine if a job is allowed access to a resource.

As per claim 9, Badovinatx et al. in view of Elley further disclose determining that the requesting member job is included in at least one list; and joining the requesting member job to the group (see Badovinatx column 7, lines 3-10).

As per claim 10, Badovinatx et al. in view of Elley further disclose upon receiving a request to leave a group from a requesting member job having membership to the group: updating each list of each job of the group to remove the requesting member job from the list (see Badovinatx column 7, lines 36-49).

As per claim 11, Badovinatx et al. in view of Elley further disclose upon receiving a request to add a new job to the group: for each current member of the group, updating a respective list to include the new job (see Badovinatx column 7, lines 17-35, where the group leader adds the new job to the list); and

for a new node, replicating the list to the new job (see Badovinatx column 6, lines 1-10, where a copy of the membership list is given to the new processor [job]).

As per claims 12, Badovinatx et al in view of Elley further disclose a computer system, comprising a first plurality of nodes, each node comprising:

a processor configured to execute at least one job (see column 6, lines 1-5); and

a memory device containing a copy of a first list; wherein each copy of the first list indicates jobs with a membership to a first group (see column 6, lines 1-10) and wherein each job is configured to access its respective copy of the first list to determine whether a requesting job of another node may be joined to the first group (see Elley Fig. 5, and column 5, lines 4-10).

As per claims 13 and 23, Badovinatx et al. in view of Elley further disclose a plurality of interfaces configured for adding jobs to the first group (see Badovinatx Fig. 12, [1204], where *yes* branch indicates first request of new member), removing jobs from the first group (see Badovinatx Fig. 13, [1300], [1306]), and joining returning member jobs to the first group (see Badovinatx Fig. 12, where *no* branch indicates a returning member).

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As per claims 14 and 20, Badovinat et al. in view of Elley further disclose each job configured to update its respective copy of the first list to include added members (see Badovinat column 13, lines 47-53).

As per claims 15 and 21, Badovinat et al. in view of Elley further disclose each job configure to update it respective copy of the first list to remove dropped members (see Badovinat column 14, lines 16-20).

As per claim 16, Badovinat et al. in view of Elley further disclose that the requesting job is joined to the first group when the first list contains a reference to a node on which the requesting job is running (see Badovinat column 7, lines 3-10).

As per claim 17, Badovinat et al. in view of Elley further disclose:

- a second plurality of nodes (see Badovinat Fig. 1, where there are a plurality of nodes containing processors running jobs); and
- a copy of a second list stored on each of the second plurality of nodes and associated with a job executing on the each of the second plurality of nodes; wherein each copy of the second list indicates a membership to a second group (see column 6, lines 1-10).

As per claims 18 and 22, Badovinat et al. in view of Elley further disclose copies of the first list and the second list are each unique on the system (see Badovinat column 4, lines 50-65, where it is implied a group can have different members, hence different lists).

As per claim 19, Badovinat et al. in view of Elley further disclose a memory of a node in a cluster, the memory containing at least a data structure, the data structure comprising a list defining membership to a group; wherein the list is replicated to each job having membership to the group (see Badovinat column 6, lines 1-10), wherein the request is granted if the other jobs of the group determine that the requesting member job is indicated in each respective list of the other jobs (see Elley column 5, lines 4-10 and 46-58).

***Response to Arguments***

2. Applicant's arguments filed April 28, 2006 have been fully considered but they are not persuasive.

(A) Applicant contends that Badovinatx does not disclose receiving a request to join a group from a requesting member job having membership to the group.

In considering (A), the Examiner respectfully disagrees. The Examiner believes that the newly cited portion of Badovinatx provides sufficient evidence supporting a request to join a group from requesting member job (see column 5, lines 1-5, where a process (job) requests to join a process group). This citation makes it clear that a process makes an attempt to join a group. Although Badovinatx describes a process rather than a job specifically, the Examiner reads the claim using the broadest reasonable interpretation, and believes that a job (i.e. a specified amount of processing performed as a unit by a computer) can be considered a process (i.e. a program or part of a program requiring an amount of processing being executed on a computer) described by Badovinatx. The Examiner has also relied upon the Elley reference to teach the requirement of the requesting member job having membership to the group. The Elley reference shows an existing member requesting membership to a group (see Fig. 5, and column 5, lines 4-10). The newly cited portion of Badovinatx in combination with Elley teaches each limitation of the claim.

***Conclusion***

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action

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is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J. Chea whose telephone number is 571-272-3951. The examiner can normally be reached on M-F 7:00-4:30 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Philip J Chea  
Examiner  
Art Unit 2153

PJC 7/18/06

  
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